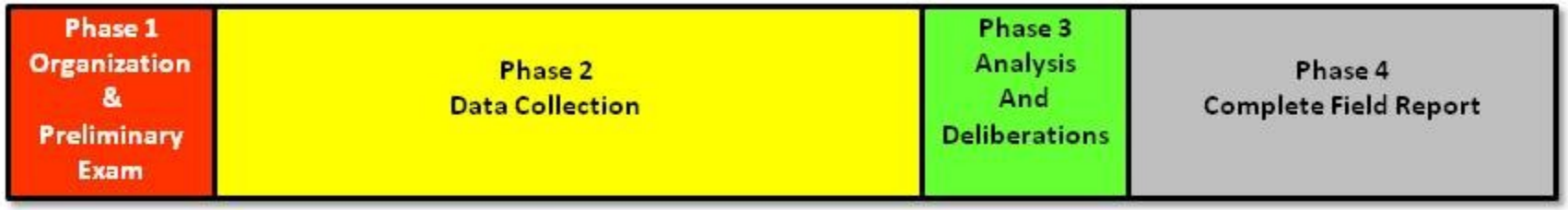
Deliberations Brief

"3W" Approach



What Happened?
(Cause Factors)

- Environmental Factor
- Materiel Failure
- Human Error

Why it Happened?
(System Inadequacies / Root Causes)

- **Environmental**
- **Material**
- **Human Error**
  - Support
  - Standards
  - Training
  - Leader
  - Individual

What to Do About It?
(Recommendations)

- Controls
- Corrective Actions
- Countermeasures

Directed to

- *Unit*
- *Higher*
- *Army*

Anomalies - Occurrences that differ from the norm (positive or negative)

Guidelines

- Leave your knives and guns at the door
- The better the discussion the better the analysis
- Refer to written standards not “common sense”
- Recommendations are the most important part
- Record process on worksheet or note pad

Deliberations Process

1. Group Anomalies into three categories: **Environmental, Material, or Human**

2. Review anomalies to determine if they were present in the accident. Then analyze to determine if they were:

Present & Contributing (PC)- Contributed to the accident.

Present but not Contributing (PBNC)- Did not contribute, but could cause an accident in the future.

Suspected PC- Suspected to have contributed to the accident.

Special Observation (SO)- In no way contributed, but the Board determined the chain of command should be informed (positive or negative)

Freebie (F)- Minor discrepancies that are brought to the chain of command, but are not in the final report.

3. Refer to DA PAM 385-40, Appendix B to determine a Task Error for the anomaly (One per finding):

Table B-1: Aviation Human Task Errors
Table B-2: Ground Human Task Errors
Table B-3: Material Failures/Malfunctions
Table B-4: Environmental Conditions

4. For human task errors refer to DA PAM 385-40, Figure 2-1 in conjunction with Table B-5 to determine root cause/system inadequacy. (there can be multiple system inadequacies).

5. Record the following information to assist in writing the finding using Table 3-1 in DA PAM 385-40:

- ❑ When and where the mistake/error occurred
- ❑ Equipment & individual (by duty position) involved
- ❑ Identify the mistake/error in relation to a deviation from a standard, directive, or common practice governing the performance of the task

Table 3-1
Elements of a human error present and contributing finding

FINDING (Present and Contributing: Human Error – Individual Failure):

Required Information	Example
1. Explanation of when and where the mistake/error occurred in context of the accident sequence of events.	While conducting day, nap-of-the-earth aircrew training at 50 feet above ground level (AGL) and 10 knots indicated air speed (KIAS)…
2. Aircraft and individual involved by duty position.	the Pilot in Command (PC) and Pilot (PI) of the UH-60…
3. Identification of mistake made *(ref aviation-specific mistakes/errors in DA PAM 385-40, Table B-1)* and an explanation of how task/activity was performed improperly. NOTE: Only one mistake/error per finding.	improperly scanned. That is, both crewmembers failed to properly scan for obstacles when they both became visually fixated on an animal on the ground…
4. Directive (ATM, SOP, FM, TM, and so forth) or common practice governing performance of task/activity.	in contravention of TC 1-237, Task 2026.
5. Consequences of mistake/error.	As a result, the aircraft main rotor blades were damaged when they made contact with a tree at approximately 50 feet AGL. There were no injuries.
6. Identification of reasons (root causes/system inadequacies) for the mistake/error {*ref System Inadequacies in Table B-5 of DA PAM 385-40}*. NOTE: The finding may contain multiple System Inadequacies (Individual, Standards, Leader, etc.)	The PC's and PI's actions were a result of overconfidence in each other's ability to clear the aircraft and maintain obstacle clearance.
7. Brief explanation of how each reason (root cause/system inadequacy) contributed to the mistake/error.	The PC and PI allowed the aircraft to fly too close to known obstacles resulting in damage to the main rotor blades.

FINDING 1: (Present and Contributing: Human Error- Individual Failure): While conducting day, nap-of-the-earth aircrew training at 50 feet AGL and 10 KIAS, the PC and PI of the UH-60L improperly scanned. That is, both crewmembers failed to properly scan for obstacles when they both became visually fixated on an animal on the ground in contravention of TC 1-237, Task 2026. As a result, the aircraft main rotor blades were damaged when they made contact with a tree at approximately 50 feet AGL. There were no injuries.
The PC's and PI's actions were a result of overconfidence in each other's ability to clear the aircraft and maintain obstacle clearance. The PC and PI allowed the aircraft to fly too close to known obstacles resulting in damage to the main rotor blades.

6. Develop Recommendations using DA PAM 385-40, Table B-6

Step 1 – Group Anomalies

Deliberations Worksheet

Materiel

Code	Anomalies (Deficiencies & failures)	Reference

Environment

Code	Conditions (Unforecast or unavoidable)	Reference

P&C	Present and contributing
PBNC	Present but not contributing
P&C S/D	Present and contributing to severity of injury or damage
O	Observation
F	Freebee

Human

Code	Anomalies (Errors - Failures - Deficiencies)	Reference

Step 2 – Categorize Anomalies

Present & Contributing(PC)- Contributed to the accident.

Present & Contributing to Severity of Injury or Damage(PC S/D)- Did not cause the accident, but contributed to a more severe injury or greater damage.

Present but not Contributing (PBNC)- Did not contribute to the accident, but could cause an accident in the future.

Suspected PC- Suspected to have contributed to the accident.

Special Observation(SO)- In no way contributed to the accident, but the Board determined the chain of command should be made aware (positive or negative).

Freebie (F)- Minor discrepancies that are brought to the chain of command, but are not in the final report.

Step 3 – What Happened

Refer to DA PAM 385-40, Appendix B to determine the Task Error for an anomaly (One per finding):

Table B-1: Aviation Human Task Errors

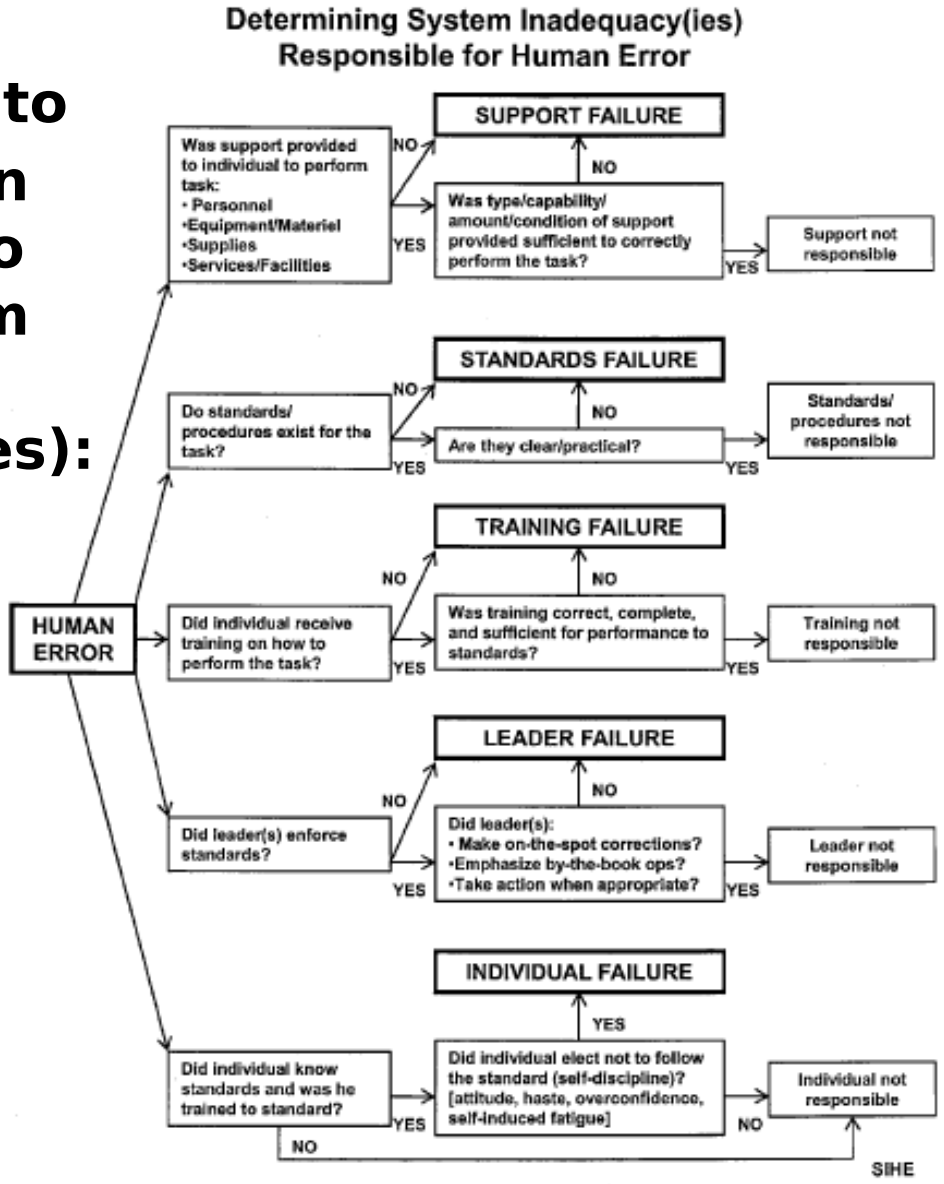
Table B-2: Ground Human Task Errors

Table B-3: Material Failures/Malfunctions

Table B-4: Environmental Conditions

Step 4 – Why it Happened

For human task errors refer to DA PAM 385-40, Figure 2-1 in conjunction with Table B-5 to determine root cause/system inadequacy (there can be multiple system inadequacies):



Step 5 - Finding

Record information on your deliberations worksheet for use with Table 3-1 in DA PAM 385-40 to develop PC findings. PBNC Findings and Special Observations do not have a format.

Deliberations Worksheet

Materiel

Code	Anomalies (Deficiencies & failures)	Reference

Human

Code	Anomalies (Errors - Failures - Defi

Environment

Code	Conditions (Unforecast or unavoidable)	Reference

P&C	Present and contributing
PBNC	Present but not contributing
P&C S/D	Present and contributing to severity of injury or damage
O	Observation
F	Freebee

Table 3-1
Elements of a human error present and contributing finding

FINDING (Present and Contributing: Human Error – Individual Failure):

Required Information	Example
1. Explanation of when and where the mistake/error occurred in context of the accident sequence of events.	While conducting day, nap-of-the-earth aircrew training at 50 feet above ground level (AGL) and 10 knots indicated air speed (KIAS)…
2. Aircraft and individual involved by duty position.	the Pilot in Command (PC) and Pilot (PI) of the UH-60…
3. Identification of mistake made *(ref aviation-specific mistakes/errors in DA PAM 385-40, Table B-1)* and an explanation of how task/activity was performed improperly. NOTE: Only one mistake/error per finding.	improperly scanned. That is, both crewmembers failed to properly scan for obstacles when they both became visually fixated on an animal on the ground…
4. Directive (ATM, SOP, FM, TM, and so forth) or common practice governing performance of task/activity.	in contravention of TC 1-237, Task 2026.
5. Consequences of mistake/error.	As a result, the aircraft main rotor blades were damaged when they made contact with a tree at approximately 50 feet AGL. There were no injuries.
6. Identification of reasons (root causes/system inadequacies) for the mistake/error {*ref System Inadequacies in Table B-5 of DA PAM 385-40}*. NOTE: The finding may contain multiple System Inadequacies (Individual, Standards, Leader, etc.)	The PC's and PI's actions were a result of overconfidence in each other's ability to clear the aircraft and maintain obstacle clearance.
7. Brief explanation of how each reason (root cause/system inadequacy) contributed to the mistake/error.	The PC and PI allowed the aircraft to fly too close to known obstacles resulting in damage to the main rotor blades.

FINDING 1: (Present and Contributing: Human Error- Individual Failure): While conducting day, nap-of-the-earth aircrew training at 50 feet AGL and 10 KIAS, the PC and PI of the UH-60L improperly scanned. That is, both crewmembers failed to properly scan for obstacles when they both became visually fixated on an animal on the ground in contravention of TC 1-237, Task 2026. As a result, the aircraft main rotor blades were damaged when they made contact with a tree at approximately 50 feet AGL. There were no injuries.
The PC's and PI's actions were a result of overconfidence in each other's ability to clear the aircraft and maintain obstacle clearance. The PC and PI allowed the aircraft to fly too close to known obstacles resulting in damage to the main rotor blades.

Step 6 - Recommendations

- **Refer to DA PAM 385-40, Table B-6 and use key words to assist in developing recommendations:**

- **To be effective recommendations are stated in broad terms. Do not be overly influenced by existing budgetary, material, or personnel restrictions.**

Table B–6
Recommendations/controls/corrective actions/countermeasures

Code: 01	
Keyword/explanation:	Improve school training. The improvement recommended should be directed toward the content or amount of school training needed to correct the accident-causing error. For example:
	Provide school training for the person who made the error due to not being school trained.
	Improve the content of a school training program to better cover the task in which the error was made.
	Expand the amount of school training given on the task in which the error was made.
Code: 02	
Keyword/explanation:	Improve unit training. The improvement recommended should be directed toward the content or amount of unit training needed to correct the accident-causing error. For example:
	Provide unit training for the person who made the error due to not being unit trained.
	Improve the content of unit training to better cover the task in which the error was made.
	Expand the amount of unit training given on the task in which the error was made.
Code: 03	
Keyword/explanation:	Revise procedures for operation under normal or abnormal/emergency conditions. The changes recommended should be directed toward changing existing procedures or including new ones. If the change is to an AR, TM, FM, Soldier's Manual, or other Army publication, tell the date when DA Form 2028 was submitted.
Code: 04	
Keyword/explanation:	Ensure personnel are ready to perform. The purpose of this recommendation is to encourage supervisors to make sure that their people are capable of performing a job before making an assignment. They should consider training, experience, physical condition, and psycho-physiological state,(for example, fatigue, haste, excessive motivation, overconfidence, effects of alcohol/drugs.)
Code: 05	
Keyword/explanation:	Inform personnel of problems and remedies. This recommendation should be used when it is necessary to relay accident-related information to people at unit, installation, Army Command (ACOM), or DA levels.
Code: 06	
Keyword/explanation:	Positive command action. The purpose of this corrective action is to recommend that the supervisor take action to encourage proper performance and discourage improper performance by the personnel.
Code: 07	
Keyword/explanation:	Provide personnel resources required for the job. This recommendation is intended to prevent an accident caused by not enough qualified people being assigned to perform the job safely.
Code: 08	
Keyword/Explanation:	Redesign (or provide) equipment or materiel. This recommendation is made when equipment or materiel caused or contributed to an accident because: a. The required equipment or materiel was not available. b. The equipment or materiel used was not properly designed.
Code: 09	
Keyword/explanation:	Improve (or provide) facilities or services. This recommendation is made when facilities or services lead to an accident because— a. The required facilities or services were not available. b. The facilities or services used were inadequate.
Code: 10	
Keyword/explanation:	Improve quality control. This recommendation is directed primarily toward the improvement of training, manufacturing, and maintenance operations where poor quality products (personnel or materiel) have led to accidents.
Code: 11	
Keyword/explanation:	Perform studies to get solutions to root cause. This recommendation should be made when corrective actions cannot be determined without special study. Such studies can range from informal efforts at unit level to highly technical research projects performed by DA-level agencies.

Questions